Abstract of the Disclosure
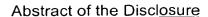
A method for extracting from an image a shape descriptor which describes shape features of the image is provided. The shape descriptor extracting method includes: (a) extracting a skeleton from an input image, (b) obtaining a list of straight lines by connecting pixels based on the extracted skeleton, and (c) determining the regularized list of straight lines obtained by normalizing a list of straight lines as the shape descriptor. A shape descriptor extracted according to the shape descriptor extracting method possesses information of a schematic feature of a shape included in an image. Therefore, the shape descriptor extracting method effectively extracts a local motion in the data collection of the same category, and the number of extracted shapes is not limited to the number of objects.